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(54) Title: APPARATUS AND METHODS FOR INVESTIGATION OF RADIOACTIVE SOURCES IN A SAMPLE**(57) Abstract**

The present invention provides an improved method for investigating radioactive sources which takes into account variations in the materials potentially making up the samples. In particular, the invention provides a method of investigating radioactive sources in a sample, the method comprising detecting a portion of the emissions arising from the sample at an energy, the detected portion relating to a detected level, the detected level being corrected according to a correction method to give a corrected level at that energy. The invention also provides improved transmission sources and improved transmission based correction techniques for use in investigating radioactive sources in a sample.

